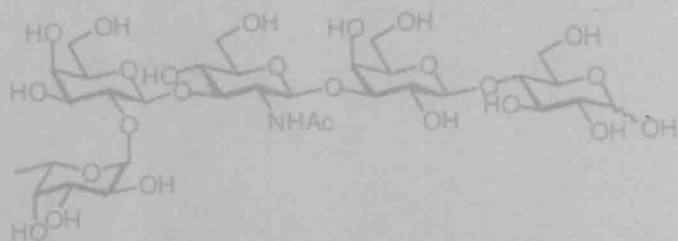
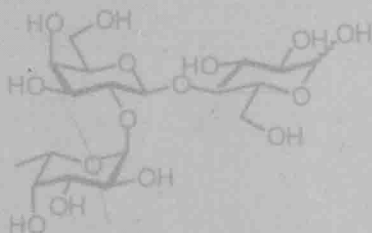
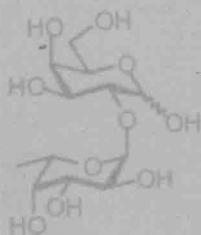


Carbohydrates



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Carbohydrates

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For Tariq, Ali and Sara

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Abbreviations

Ac	acetyl
All	allyl
Alloc	allyloxycarbonyl
aq.	aqueous
Ar	unspecified Aryl substituent
Asn	asparagine
ATP	adenosine 5'-triphosphate disodium salt
BDA	butane diacetal
Bn	benzyl
Boc	<i>tert</i> -butoxycarbonyl
BSA	bovine serum albumin
Bu	butyl
^t Bu	<i>tert</i> -butyl
Bz	benzoyl
c	concentration
C.I.	chemical ionisation
CAN	ceric ammonium nitrate
cat.	catalytic
CDA	cyclohexane-1,2-diacetal
CDP	cytidine diphosphate
ClAc	chloroacetyl
CMP	cytidine 5'-monophosphate
conc.	concentrated
COSY	correlation spectroscopy
CSA	(+/-)-10-camphorsulfonic acid
d	doublet
δ	chemical shift
DAST	diethylamino sulfurtrifluoride
DBU	1,5-diazabicyclo[4.3.0]non-5-ene
DCC	dicyclohexylcarbodiimide
DCE	dichloroethane
DCM	dichloromethane
DDQ	2,3-dichloro-5,6-dicyano-1,4-benzoquinone
DHP	dihydropyran
dispoke	dispiroketal
DMAP	4-dimethylamino pyridine
DME	1,2-dimethoxyethane
DMF	dimethylformamide

DMPM	3,4-dimethoxybenzyl
DMSO	dimethylsulfoxide
DMTST	dimethyl(methylthio)sulfonium triflate
DTBMP	2,6-di- <i>t</i> -butyl-4-methylpyridine
Dts	dithiasuccinoyl
EEDQ	2-ethoxy-1-ethoxycarbonyl-1,2-dihydroquinoline
equiv.	stoichiometric equivalents
Et	ethyl
FAB	fast atom bombardment
Fmoc	9-fluorenylmethyloxycarbonyl
Fuc	fucose
Gal	galactose
GalNAc	galactosamine
GDP	guanidine diphosphate
Glc	glucose
GlcNAc	glucosamine
h	hours
Hz	Hertz
IDCP	iodonium di- <i>sym</i> -collidine perchlorate
ⁱ Pr	<i>iso</i> -propyl
IR	infra red
<i>J</i>	coupling constant
KDN	3-deoxy-D- <i>glycero</i> -D- <i>galacto</i> -non-2-ulosonic acid
LDMAN	lithium 1-(dimethylamino) naphthalenide
Lev	levulinate
lit.	literature value
LN	lithium naphthalenide
m	multiplet
m	<i>meta</i>
M	molar concentration
MCPBA	<i>meta</i> -chloroperbenzoic acid
m.p.	melting point
m/z	mass to charge ratio
Me	methyl
Man	mannose
min	minutes
mol	mole
MS	molecular sieves
Ms	mesyl
NBA	<i>N</i> -bromoacetamide
NBB	<i>N</i> -bromobenzamide
NBP	<i>N</i> -bromophthalimide
NBS	<i>N</i> -bromosuccinimide
Neu	neuraminic acid

Neu5Ac	<i>N</i> -acetyl derivative of neuraminic acid
Neu5Gc	<i>N</i> -glycolyl derivative of neuraminic acid
NIS	<i>N</i> -iodosuccinimide
NMR	nuclear magnetic resonance
NPG	<i>n</i> -pentenyl glycoside
NTP	nucleotide triphosphate
<i>o</i>	<i>ortho</i>
<i>p</i>	<i>para</i>
Pfp	pentafluorophenyl
Ph	phenyl
phth	phthaloyl
Piv	pivaloyl
PMB	<i>p</i> -Methoxybenzyl
PNP	<i>para</i> -nitrophenyl
ppm	parts per million
PPTS	pyridinium <i>para</i> -toluenesulfonate
Py	pyridine
R _f	retention factor
Rha	rhamnose
rt	room temperature
Ser	serine
sLe ^x	sialyl Lewis ^x
S.M.	starting material
sTn	sialyl Tn
t	triplet
TBAF	tetrabutylammonium fluoride
TBAI	tetra butyl ammonium iodide
TBDMS	<i>tert</i> -butyldimethylsilyl
TBDPS	<i>tert</i> -butyldiphenylsilyl
TBPA	tris(4-bromophenyl)ammoniumyl hexachloroantimonate
Teoc	2,2,2-trichloroethoxycarbonyl
TES	triethylsilyl
Tf	triflate
TFA	trifluoroacetic acid
TFAc	<i>N</i> -trifluoroacetyl
TfOH	triflic acid
THF	tetrahydrofuran
THP	tetrahydropyran
Thr	threonine
TIPS	tri- <i>iso</i> -propylsilyl
TLC	thin layer chromatography
TMS	trimethylsilyl
TMSOTf	trimethylsilyl trifluoromethanesulfonate
TPS	triphenylsilyl

Tr	trityl
Troc	2,2,2-trichloroethoxycarbonyl
Ts	<i>para</i> -toluene sulfonyl
U	units
UDP	uridine triphosphate
v_{\max}	frequency maximum
Xyl	xylose

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